



UNITED STATES ARTMENT OF COMMERCE Patent and Trademark Office

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

PM92/1213

JAMES L JACKSON
MAYOR DAY CALDWELL AND KEETON LLP
SUITE 1900
700 LOUISIANA
HOUSTON TX 77002-2778

APPLICATION NO.		FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	T DATE MAILED
	09/320,222	2 05/26/99	0 0 0 1	COTTINGHAM, J	3629 12/13/0
First Named Applicant	DIETLE	,	35 (JSC 154(b) term ext. =	O Days.
TITLE OF INVENTION	HIGH PRESSI	JRE ROTARY S	HAFT SEALIN	NG MECHANSIM	

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. T	YPE	SMALL ENTITY	Y	FEE DUE	DATE DUE
3 456845.4	18-KA 277-33	85.000	W28	UTI	LITY	YES	\$620.	00 03/13/01

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u>

HOW TO RESPOND TO THIS NOTICE:

- I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:
 - A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
 - B. If the status is the same, pay the FEE DUE shown above.
- If the SMALL ENTITY is shown as NO:
- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.
- II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give application number and batch number.

 Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PATENT AND TRADEMARK OFFICE COPY

ĭ.	Application No.	Applicant(s)					
Alatina of Allowah Willia	09/320,222	DIETI E ET AI	DIETLE ET AL.				
Notice of Allowability	Examiner	Art Unit					
	John R. Cottingham	3629					
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance and Issue F THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATE initiative of the Office or upon petition by the applicant. See 37 CF	(OR REMAINS) CLOSED in Fee Due or other appropriate NT RIGHTS. This application	this application. If not included	due course				
1. This communication is responsive to the amendment filed of	on 10/27/2000.						
2. The allowed claim(s) is/are <u>1-31</u> .							
3. The drawings filed on are acceptable as formal draw	vings.						
 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a) ☐ All b) ☐ Some* c) ☐ None of the: 							
 Certified copies of the priority documents have 	been received.						
2. Certified copies of the priority documents have	been received in Application	n No					
Copies of the certified copies of the priority doc	uments have been received	in this national stage application	from the				
International Bureau (PCT Rule 17.2(a)).							
* Certified copies not received:							
5. Acknowledgement is made of a claim for domestic priority u	nder 35 U.S.C. & 119(e).						
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of to the attached EXAMINER'S AMENDMENT or NOTICE	his application. THIS THRE EOF INFORMAL APPLICAT	EE-MONTH PERIOD IS NOT EXT	ENDABLE.				
the oath or declaration is deficient. A SUBSTITUTE OATH	OR DECLARATION IS RE	QUIRED.	` , ,				
7. Applicant MUST submit NEW FORMAL DRAWINGS							
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Review	(PTO-948) attached					
1) ☐ hereto or 2) ☐ to Paper No							
(b) ☐ including changes required by the proposed drawing co							
(c) ☐ including changes required by the attached Examiner's	(c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No.						
Identifying indicia such as the application number (see 37 should be filed as a separate paper with a transmittal lette	CFR 1.84(c)) should be we r addressed to the Official	ritten on the drawings. The drawings. The drawings. The drawings.	wings				
8. Note the attached Examiner's comment regarding REQUIR	EMENT FOR THE DEPOSI	T OF BIOLOGICAL MATERIAL.					
Any reply to this letter should include, in the upper right hand corne applicant has received a Notice of Allowance and Issue Fee Due, t ALLOWANCE should also be included.	er, the APPLICATION NUME he ISSUE BATCH NUMBER	BER (SERIES CODE / SERIAL NUT AND DATE of the NOTICE OF	JMBER). If				
Attachment(s)							
 1 Notice of References Cited (PTO-892) 3 Notice of Draftperson's Patent Drawing Review (PTO-948) 5 Information Disclosure Statements (PTO-1449), Paper No 7 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	4∐ Interview 6∐ Examiner	Informal Patent Application (PTO- Summary (PTO-413), Paper No 's Amendment/Comment 's Statement of Reasons for Allow	·				

Application/Control Number: 09/320,222

Art Unit: 3629

EXAMINER'S AMENDMENT

The following is an examiner's statement of reasons for allowance: in view of the 1. Applicants arguments and a review of the prior art by the Examiner; the prior art of record neither teaches nor suggests all of the claimed subject matter of claim 1 including first and second rotary sealing elements axially spaced apart with a staging pressure chamber formed there between with a staging fluid supply communicating a second fluid at a staging pressure to the staging pressure chamber; the prior art of record neither teaches nor suggests all of the claimed subject matter of claim 19 including first and second rotary sealing elements axially spaced apart with a pressure staging chamber having a second fluid at a pressure P2 which is less that pressure P1, and the laterally translateable annular seal carrier means being hydraulic force balanced in the axial direction so as to permit lateral translation of regardless of the magnitude of pressure P1; the prior art of record neither teaches nor suggests all of the claimed subject matter of claim 29 including a bulkhead means establishing axially spaced annular seal carrier recesses with a plurality of seal carriers with rotary seals located within them, and at least one annular staging chamber defined between the seals and a second fluid at a staging pressure P2 less than P1 in communication with the staging chamber.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Cottingham whose telephone number is (703) 306-3439. The examiner can normally be reached on Monday - Thursday, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3597 for regular communications and (703) 305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-216.

ynne H. Browne

Supervisory Patent Examiner

Tech Center 3600

John R. Cottingham December 7, 2000